Patent Application of

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For

TITLE: PERSONAL FLOTATION VEST

CROSS-REFERENCE TO RELATED APPLICATIONS PPA#

FEDERALLY SPONSORED RESEARCH Not Applicable

SEQUENCE LISTING OR PROGRAM Not Applicable

BACKGROUND OF THE INVENTION—FIELD OF INVENTION

This invention relates to personal flotation vest, specifically a floatation vest with improved flotation for supporting wearer in a horizontal position.

BACKGROUND OF INVENTION

Many personal flotation vests do not support wearer in a horizontal position and providing head support. This vest is structured for comfortable support and keeps wearers head above water level and to orient the head into a face up attitude caused by front, head flap and buttocks flotation. The United States Coast Guard ("USCG") has established guidelines for determining the performance level of a life vest or personal flotation device ("PFD"), based on the life saving capacity of such devices. For instance, Underwriter Laboratories, Inc., which is understood by the inventor hereof to be an approved testing agency for the USGC, lists several categories of "Buoyant Devices," in its Mar 29 1996 handbook entitles "UL 1123 Standard for Marine Buoyant Devices," which is incorporated herein by reference. One of these categories is for a Type I device, also referred to as an "off-shore" PFD which is intended to turn unconscious wearers face up in the water and which is best suited for open, rough or remote water where rescue may be slow

coming. There is also a Type II device, sometimes also referred to as a "near shore" PFD, which is intended to turn over unconscious persons from a face down position in the water to a position where the wearers respiration is not impeded. These PFDs are good for calm, inland water or where there is a good chance of fast rescue. Other categories of PFDs include a Type III device, which is "intended to support a conscious person in the water in an upright position [or backward position but] is not required to turn an unconscious person in the water from a face-down position where the wearers respiration is not impeded."

Regarding infants and toddlers, PFDs must provide additional support as these children do not know how to swim and often lack the awareness to refrain from actions, which may cause the PFD to become unattached. Frightened children flail about in an attempt to regain a certain comfort zone. As a result loosely connected or fittings PFDs become partially or completed separated from the infant wearer. Further it is important for an infant PFD to turn the infant to a face up position without effort from the child. There is tendency for a PFD to "ride up" from the intended position about the torso of the wearer. This "ride up" tendency creates a situation where an inexperienced wearer is susceptible to becoming separated from the PFD. Further, the cause for the tendency to ride up is a loose fitting design. Accordingly, there remains a need for a infant toddler PFD to not only meet the lifesaving criteria of the USCG, but which supports the wearer in a face up position and is securely fastened to the body of the wearer such that the wearer may not easily be separated from. Ideally, any PFD should permit wearer freedom of movement even when immersed in water. Any such PFD should also be relatively simple in construction, inexpensive to manufacturer, and capable of enabling a person to determine easily how to don the PFD, so the period of time that it may be readily donned is short.

SUMMARY

In accordance with the present invention, this PFD to be used for infants from 6-25lbs, (adjustments as to scale maybe used for wearers of larger dimensions and are not limited). Allows wearer to safely and quickly become face up while immersed in water and have support from the head and buttock areas to keep wearer above the water level.

DRAWINGS

Figure 1 is a perspective view of the PFD of the present invention as worn by a wearer.

Figure 2 is a front view with head support flap up.

Figure 3 is a rear view

Figure 4 is a side view

Figure 5 is a front view with the moveable flap in the down position.

Figure 6 is a rear view with the moveable flap in the down position.

DRAWINGS—Reference Numerals

10 Infant PFD of present invention

11 Head support flap

12 Handle strap

13 Neck opening

14 Right arm

15 Right leg

16 Left leg

17 Left arm

18 Side zipper, hook and loop, buttons or any other closure system

19 Shoulder area where flap, front and rear panels are joined together

20 Buoyant material

21 Front outer shell

22 Front inner shell

23 Rear shell

24 Buttocks outer shell

25 Top of flap shell

26 Bottom of flap shell

27 sides and top shell

DETAILED DESCRIPTION—

Fig 1 is a perspective view of the PFD of the present invention as worn by a wearer.

Fig 2 shows a frontal perspective view of the PFD in accordance with an embodiment of this invention. PFD 10 includes a front outer shell #21 and a inner shell #22 which is sewn together with buoyant material #20 in between. There are openings for arms #14 and #17, leg openings #15 and #16 and 1 head opening #13. There is a fast closure system #18 used such as a zipper, buttons, hooks and loops, straps etc. The head support flap #11 consists of a front shell #25, buoyant material #20 and a back shell #26 with sides #27 and a handle strap #12 attached to PFD by the shoulders are #19.

Fig 3 shows a rear perspective view of the PFD #10. The rear panel #23 is sewn at shoulder area #19 and is joined by the fast closure system #18. There is a buttocks rear shell #24 which is sewn surrounding buoyant material #20. The handle strap #12 is sewn to flap #11. The flap #11 is sewn at the shoulder area #19.

Fig 4 shows a side perspective view of PFD #10. This shows the head support flap #11 attached at shoulder area #19. It shows front shell #25, and rear shell #26 with sides #27, sewn together with the buoyant material #20 in between. The handle strap #12 is sewn to the top of flap #27. This view shows the front outer shell #21, front inner shell #22 and the buoyant material #20 and sewn in-between. It shows the rear panel #23 with the outer buttock shell #24 sewn with the buoyant material #20 in-between. It shows a fast closure system #18 that attaches the front shell #21 and rear shell together to hold wearer securely in PFD #10 when worn.

Fig 5 shows a frontal and a partial side and back view. It shows the head opening #13. it has the head support flap #11 attached to the shoulder area #19. It has the arm openings #14 and #17. The fast closure system #18 is shown attaching the front outer shell #21 and the rear outer shell 23 together as a wearer would have it closed. The front outer shell #21 is shown on top of the buoyant material #20 with the inner front shell #22 sewn behind the buoyant material #20 to create a cavity for the buoyant material #20.

Fig 6 shows the rear view with the head support flap #11 in the down poisiton. The head opening is #13 and the handle strap #12 is sewn to the top of the head support #11. The fast closure system #18 is shown in the closed position with the front shell #21 and rear shell #23 brought together to secure wearer in the PFD #10. The legs openings are #15 and #16. The rear buttock shell #24 is sewn to create a cavity to encapsulate the buoyant material #20.